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EXAMINER
SETH, MANAV

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>21 April 2009</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-33</u> is/are pending in the application.

   4a) Of the above claim(s) <u>12 and 29</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-4,7-11,13-21,24-28 and 30-33</u> is/are rejected.

7)☒ Claim(s) <u>5,6,22 and 23</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date <u>121/6/2003</u>.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Election/Restrictions

1.   Applicant's election without traverse of species II including claims 6 and 23 in the reply filed

on 04/21/2009 for examination is acknowledged. Claims 12 and 29 are therefore withdrawn from

the examination and the election/restriction is herein made final.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1-3, 7, 8, 13, 17-19, 24-25 and 30 are rejected under 35 U.S.C. 102(b) as being

anticipated by Hayes, Jr. et al., U.S. Patent No. 6,283,858 B1.

Regarding claim 1, Hayes discloses a method comprising: capturing a plurality of input

images (col. 4, lines 39-42), extracting one or more facial images from the plurality of input images

(col. 4, lines 43-53 – determine player's natural layout); replacing at least one replaceable actor image

with at least one of the plurality of input images in a video sequence and creating a movie based on

the replaced at least one replaceable actor image (col.4, lines 54-65 and lines 17-38).

Regarding claim 2, Hayes discloses receiving the one or more facial images automatically from one or more images (col. 11, lines 44-54 – discloses algorithms that automatically provides the face layout from the images).

Regarding claim 3, Hayes discloses receiving the plurality of input images comprising receiving at least one image from a scanned photograph (col. 3, lines 66 through col. 4, line 6 - input data can provided through a scanner)

Regarding claim 7, Hayes discloses playing the movie in real time (col. 7, lines 38-45 – the resulting digital image is accessible by the video game machine 14 so that when the game is played, the image of the character is replaced by the resulting digital image 28. This effectively allows a child to enter his/her image into the digital computer 12 for substitution with characters in the video game. When the game is played, the child sees himself or herself in action).

Regarding claim 8, Hayes discloses changing content in the movie based on a controllable graphical object (col. 12, lines 1-15 – controllable graphical object).

Regarding claim 13, Hayes discloses printing one or more shots of the created movie (col. 13, lines 40-42).

Regarding claim 17, claim 17 has been similarly analyzed and rejected as per claim 1.
Regarding claim 18, claim 18 has been similarly analyzed and rejected as per claim 2.
Regarding claim 19, claim 19 has been similarly analyzed and rejected as per claim 3.

Regarding claim 24, claim 24 has been similarly analyzed and rejected as per claim 7.

Regarding claim 25, claim 25 has been similarly analyzed and rejected as per claim 8.

Regarding claim 30, claim 30 has been similarly analyzed and rejected as per claim 13.

3.   Claims 1, 7, 13-14, 17, 24, 30 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee et al., IEEE Publication, 2001, "CFBOX: Superimposing 3D human face on motion picture" (pages 1-8).

Regarding claim 1, Lee discloses a method comprising: capturing a plurality of input images and extracting one or more facial images from the plurality of input images ((page 2, 1st paragraph, figure 1; Abstract); replacing at least one replaceable actor image with at least one of the plurality of input images in a video sequence and creating a movie based on the replaced at least one replaceable actor image (page 2, 1st paragraph, figure 1; Abstract).

Regarding claim 7, Lee discloses playing the movie in real time (Abstract; topic 3 – "Implementation and Experiments" – first paragraph).

Regarding claim 13, Lee discloses printing one or more screen shots of the created movie (page 2, Topic - "The CFBOX system" - 1st paragraph - printing out results such as photo sticker or a CDR).

Regarding claim 14, Lee discloses showing visual information and instruction about creating the movie (Topic - "Introduction" - 2nd paragraph – THE CFBOX is a standalone kiosk and has a user-friendly interface, so novice user could operate it without difficulty; Topic – "2.2. 3D Face Modeling" - The CFBOX provides GUI for this process).

Regarding claim 17, claim 17 has been similarly analyzed and rejected as per claim 1.

Regarding claim 24, claim 24 has been similarly analyzed and rejected as per claim 7.

Regarding claim 30, claim 30 has been similarly analyzed and rejected as per claim 13.

Regarding claim 31, claim 31 has been similarly analyzed and rejected as per claim 14.

3.   Claims 1-2, 4, 7-11, 14-16, 17, 18, 20-21, 24-28 and 31-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Gutta et al., U.S. Patent Publication No. 2003/0007700.

Regarding claim 1, Gutta discloses a method comprising: capturing a plurality of input images and extracting one or more facial images from the plurality of input images (figure 2, para 0019 – static model 230 of the user which is obtained by apparently extracting facial images from the input images); replacing at least one replaceable actor image with at least one of the plurality of input images in a video sequence and creating a movie based on the replaced at least one replaceable actor image (paras 0005, 0013 – the image processing system 100 allows one or more users to participate in an image or image sequence, such as video sequence or video game sequence, by replacing an image of an actor (or a portion thereof, such as the actor's face) in an original image sequence with an image of the corresponding user (or a portion thereof, such as the user's face); para. 0014 – a video integration stage overlays or superimposes the modified user model over the actor in the original image sequence **to produce an output video sequence containing the user in the position of the original actor).**

Regarding claim 2, Gutta discloses receiving the one or more facial images automatically from one or more images (paras 0025 – 0026 – discloses algorithms that automatically provides the face model from the images).

Regarding claim 4, Gutta discloses storing at least one replaceable actor image using a participative movie format (para 0013 – Gutta discloses "the actor to be replaced may be selected by the user from the image sequence, or may be predefined or dynamically determined, where predefining requires storing).

Regarding claim 7, Gutta discloses playing the movie in real-time (para. 0013 – the image processing allows one or more users to participate in an image or image sequence, such as video sequence or video game sequence, where participation is in real time since the output is produced right away (para 0014 - last few lines)).

Regarding claim 8, Gutta discloses changing content in the movie based on a controllable graphical object (paras 0027, 0029 – static model of user is controllable).

Regarding claim 9, Gutta discloses synchronizing dynamic content adjustment to give seamless flow of playing the movie (0027, 0029- synchronizing the deformation of facial expressions of the actor with that of user for seamless flow of playing the movie).

Regarding claim 10, Gutta discloses storing the one or more facial images in a database and retrieving a facial image of the stored one or more facial images form the database for use as an input image (para. 0014, 0026; figure 2, element 220-2 – database)

Regarding claim 11, Gutta discloses retrieving the at least one of the replaceable actor image from a database (para 0013 - the actor to be replaced may be selected by the user from the image sequence, or may be predefined, where predefined selection requires retrieving stored actor).

Regarding claim 14, Gutta discloses showing visual information and instruction about creating the movie (Gutta discloses image processing system providing options for creating movie and one of the options is selecting the actor to be replaced (para 0013); further adding the system let's user participate in the creating movie and in order to do so, some instruction are apparently needed).

Regarding claim 15, Gutta discloses extracting the one or more facial images comprises extracting the one or more facial images in real time (para 0013 - the actor to be replaced may be selected by the user from the image sequence, .. or dynamically determined, where dynamic determination is a real time process and extracting the facial image in real-time happens when the image is obtained by camera 220-1, when the user wants to participate in real time).

Regarding claim 16, Gutta discloses wherein extracting the one or more facial images comprising extracting the one or more facial images against an uncontrolled background (as

discussed before, Gutta extracts facial images to provide a static model and clearly the background is

not involved and thus is not controlled).

Regarding claim 17, claim 17 has been similarly analyzed and rejected as per claim 1.

Regarding claim 18, claim 18 has been similarly analyzed and rejected as per claim 2.

Regarding claims 20 and 21, claims 20 and 21 has been similarly analyzed and rejected as per

claim 4.

Regarding claims 24-28, claims 24-28 has been similarly analyzed and rejected as per claims

7-11.

Regarding claims 31-33, claims 31-33 has been similarly analyzed and rejected as per claims

14-16.

5.   Claims 5-6 and 22-23 are objected to as being dependent upon a rejected base claim, but

would be allowable if rewritten in independent form including all of the limitations of the base claim

and any intervening claims.

Examiner note: Examiner has cited particular columns and line numbers in the references as
applied to the claims above for the convenience of the applicant. Although the specified citations are
representative of the teachings for the art and are applied to the specific limitations within the
individual claim, other passages and figures may be applied as well. It is respectfully requested from
the applicant in preparing responses, to fully consider the references entirely as potential teachings
all or part of the claimed invention, as well as the context of the passage as taught by the prior art or
disclosed by the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manav Seth whose telephone number is (571) 272-7456. The examiner can normally be reached on Monday to Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali, can be reached on (571) 272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Manav Seth/
Examiner, Art Unit 2624
July 7, 2009